

**Abstract of the Disclosure**

**[0061]** A system and method for automatic gain and slope equalization for provisioning telephone circuits is provided. A first unit is installed at the company end of a copper pair transmission line. A second unit is installed between customer premises equipment (CPE) and the copper pair transmission line. The second unit is programmed to disconnect the CPE, and to transmit a test signal, preferably comprising a square wave with a known amplitude and fundamental frequency of 1kHz. The signal is received at the first unit, and the fundamental frequency and odd harmonic frequencies are analyzed. Based on the analysis, the first unit thereafter compensates for impairments in the transmission line. The test procedure can be initiated from either the first unit or the second unit. The first unit is programmed to produce a command sequence, preferably comprising a series of DC voltages applied to the tip and ring leads, and received at the second unit. The second unit is programmed to recognize the series of DC voltages and begin transmitting the test signal. The second unit is preferably able to signal the first unit to begin a test sequence by drawing a DC current through the tip and ring leads for a predetermined period of time, which is recognized by the first unit. The second unit is further adapted to be a passive device, and to have an energy storage device to provide power to the unit during transmission of the command sequence.